

Claims

1. A pair of primers with forward primer of SEQ ID NO. 1 having sequence of CCAAGCTTGCTGAACGCATCGG, and reverse primer of SEQ ID No. 2 having sequence of CCAAGCTTGCCACGCAGGATTATC.
2. A pair of primers as claimed in claim 1, wherein the primers help identify plants *Artemisia annua* containing high content of artemisinin.
3. A screening method for early identification of plants *Artemisia annua* having high content of artemisinin and thereby helping generation of plant population with further high content of artemisinin, said method comprising steps of:
 - a. isolating DNA from the plant,
 - b. running PCR on the isolated DNA using a pair of primers of SEQ ID Nos. 1 and 2,
 - c. identifying plants having high content of artemisinin, containing nucleotide SEQ ID No. 3, and
 - d. crossing the identified plants to produce the next generation plants with further higher content of artemisinin.
4. A screening method as claimed in claim 3, wherein the plants can be identified at nursery stage itself.
5. A screening method as claimed in claim 3, wherein the high content refers to concentration of 0.4 w/w/% or more.
6. A screening method as claimed in claim 3, wherein the plant with higher content of artemisinin ranging between 0.5 to 1.4 w/w/% are produced.
7. A screening method as claimed in claim 3, wherein the increase in the artemisinin genetic advance (GA) is about 0.4 w/w % in first four years.
8. A screening method as claimed in claim 3, wherein the artemisinin content heritability (h) is about 80.
9. A screening method as claimed in claim 3, wherein the method helps maintains elite genotypic population.